

**REMARKS**

Favorable reconsideration of this application, as amended, is respectfully requested.

At the outset, Applicants would like to thank Examiner Shewareged for the courtesies extended to Applicants' representative during the interview conducted at the U.S. Patent and Trademark Office on October 23. *See*, Interview Summary dated October 23, 2007.

Claims 1–14 and 16–37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kaule (US 6,146,773) in view of Hofmann (US 4,791,017), Witzman (US 6,202,591) and Applicants' disclosure. However, no specific rejections were levied against the majority of the claims, i.e., Claims 2–5, 8–11, 13, 17–20, 23–25 and 27–35. Instead, the Office Action merely alleges that these claims "do not appear to contain any additional features which could lead to a subject matter that is novel" (Office Action at Page 3, 1<sup>st</sup> Paragraph). Applicants disagree, and submit these claims do, indeed, recite patentable subject matter. If the examiner chooses to take official notice of "well known" art, Applicants insist that adequate evidence be placed into the record to support any such factual assertions. *See*, MPEP § 2144.03.

In the interests of securing an expedited Notice of Allowance, and as discussed during the interview, Claim 1 has been amended to recite certain features of the claimed invention more perspicuously. Support for this amendment may be found, for example, in Paragraph 14 of the Specification (Pages 4–5). No new matter has been added, and Applicants submit that none of the cited references, taken either singly or in combination, teaches or suggests all of the features recited by Claim 1.

Kaule discloses a security thread that has a magnetic layer of iron or nickel and an additional metallic layer that creates color effects. Kaule fails to teach or suggest measuring the color composition of a precious-metal-colored coating by reflection measurement, comparing the measured color composition to a desired color composition and correcting deviations in the color composition of the coating, from the desired color composition, by adjusting at least one of a heating power and an energy of an electron beam, as recited by Claim 1. To the contrary, Kaule is completely silent with respect to the method used to produce his metallic layer, as admitted by the Office Action (Paragraph 4, Page 2). Even assuming, *arguendo*, that the same application method is used for the magnetic and metallic layers, as alleged by the Office Action, Kaule simply fails to disclose the claimed measuring, comparing and correcting deviations in the color composition of a precious-metal-colored coating.

Hofmann fails to cure the deficiencies of Kaule. Hoffman's gold-toned underlayer 2 is deposited on substrate 1, over which gold surface layer 3 is then deposited. *See*, e.g., FIG. 7; Col. 5:4–11. Hoffman teaches that his gold-colored underlayer 2 matches the color of, is harder than, and does not wear away as quickly as, his gold surface layer 3. *See*, e.g., Col. 2:13–31, etc. While Hoffman discloses various deposition methods for underlayer 2, Hoffman fails to teach or suggest measuring the color composition of a precious-metal-colored coating by reflection measurement, comparing the measured color composition to a desired color composition and correcting deviations in the color composition of the coating, from the desired color composition, by adjusting at least one of a heating power and an energy of an electron beam, as recited by Claim 1.

Witzman fails to cure the deficiencies of Kaule and Hofmann. Witzman discloses a vapor deposition process in which "the heater power supply and/or substrate drive are regulated by a control circuit responsive to a coating control monitor that measures a property of the coating, which is indicative of the film thickness" (Col. 7:48–58). Witzman, however, is entirely silent with respect to controlling the color of a deposited coating. In fact, Witzman merely relates to producing coatings "having a high optical quality and being essentially free of defects from particulate ejected by the source material," and, in particular, to producing coatings for optical interference products. *See*, e.g., Col. 5:26–35. At most, Witzman suggests that his coating thickness measurement can be made easier if an aluminium substrate is used. *See*, Col. 18:16–18 ("The substrate was polyester film having a thickness of 0.002 in. The polyester had been aluminized to facilitate coating thickness measurements"). Consequently, Witzman fails to teach or suggest measuring the color composition of a precious-metal-colored coating by reflection measurement, comparing the measured color composition to a desired color composition and correcting deviations in the color composition of the coating, from the desired color composition, by adjusting at least one of a heating power and an energy of an electron beam, as recited by Claim 1.

Accordingly, Claim 1 is allowable over the cited references. Furthermore, Claims 2–14 and 16–37, depending from Claim 1, are also allowable, at least for the reasons discussed above.


In view of the foregoing amendment and remarks presented herein, Applicants respectfully submit that this application is in condition for allowance and should now be passed to issue.

A Notice of Allowance is respectfully solicited.

If any extension of time is required in connection with the filing of this paper and has not been requested separately, such extension is hereby requested.

The Commissioner is hereby authorized to charge any fees and to credit any overpayments that may be required by this paper under 37 C.F.R. §§ 1.16 and 1.17 to Deposit Account No. 02-2135.

Respectfully submitted,



November 16, 2007

By: \_\_\_\_\_

Rothwell, Figg, Ernst & Manbeck P.C.  
1425 K Street, N.W., Suite 800  
Washington, D.C. 20005  
(202) 783-6040 (voice)  
(202) 783-6031 (fax)

George R. Repper  
Registration No. 31,414

Adam M. Treiber  
Registration No. 48,000

#1448055\_1